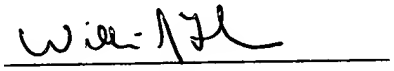
REMARKS

Applicant respectfully submits that the application, as amended, is in condition for allowance and respectfully requests such action. Should it facilitate allowance of the application, the Examiner is invited to telephone the undersigned attorney.

A USPTO Credit Card Payment form authorized in the amount of $576.00 is enclosed to cover the addition of Claims 37-54. If this amount is incorrect, the Commissioner is authorized to charge any fees which may be required for this paper to Deposit Account No. 50-1481.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Please amend Claims 16, 26 and 31 and add new Claims 37-54 as follows:

-- 16. (Once Amended) The protein crystallography plate of Claim 10, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution [a sample solution] into said first well and to automatically deposit the [a] reagent solution into said second well.

26. (Once Amended) The method of Claim 21, wherein each well is positioned on said frame so as to enable a Society of Biomolecular Screening compatible liquid handling system to automatically deposit the protein solution and the reagent solution [a sample solution] into said first well and to automatically deposit the [a] reagent solution into said second well.

31. (Once Amended) The method of Claim 29 [20], wherein said first well and said second well are adjacent to one another.

37. (Added) A protein crystallography plate, comprising:

a frame made from cyclo-olefin that includes a plurality of wells formed therein, each well is also made from cyclo-olefin and includes:

a first well including a relatively small reservoir capable of receiving a protein solution and a reagent solution; and

a second well including a relatively large reservoir capable of receiving a reagent solution that has a higher concentration than the reagent solution within said first well, wherein the protein solution and the reagent solution within said first well interact with the reagent solution within said second well via a vapor diffusion process which enables the formation of protein crystals within said first well.

38. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well overlap one another.

39. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well are adjacent to one another.

40. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well are connected to one another by a channel.

41. (Added) The protein crystallography plate of Claim 37, wherein said frame has a footprint capable of being handled by a robotic handling system.

42. (Added) The protein crystallography plate of Claim 37, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

43. (Added) A method for using a microplate to form protein crystals, said method comprising the steps of:

prepping the microplate which is made from cyclo-olefin and includes a frame having a plurality of wells formed therein where each well includes a first well having a relatively small reservoir and a second well having a relatively large reservoir, said step of prepping further includes:

depositing into the first well a protein solution and a reagent solution; and

depositing into the second well a reagent solution that has a higher concentration than the reagent solution deposited into the first well; and

sealing an opening of each well to enable the protein solution and the reagent solution within the first well to interact with the reagent solution within the second well via a vapor diffusion process which leads to the formation of protein crystals within the first well.

44. (Added) The method of Claim 43, wherein said first well and said second well overlap one another.

45. (Added) The method of Claim 43, wherein said first well and said second well are adjacent to one another.

46. (Added) The method of Claim 43, wherein said first well and said second well are connected to one another by a channel.

47. (Added) The method of Claim 43, wherein said microplate has a footprint capable of being handled by a robotic handling system.

48. (Added) The method of Claim 43, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

49. (Added) A method for making a microplate, said method comprising the steps of:

injecting molten cylco-olefin into a mold cavity that includes sections shaped to form said microplate, said microplate includes:

a frame having a plurality of wells formed therein, each well including:

a first well having a relatively small reservoir; and

a second well having a relatively large reservoir positioned near the relatively small reservoir of the first well; and

cooling the cylco-olefin to create said microplate.

50. (Added) The method of Claim 49, wherein said first well and said second well overlap one another.

51. (Added) The method of Claim 49, wherein said first well and said second well are adjacent to one another.

52. (Added) The method of Claim 49, wherein said first well and said second well are connected to one another by a channel.

53. (Added) The method of Claim 49, wherein said frame has a footprint capable of being handled by a robotic handling system.

54. (Added) The method of Claim 49, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit a sample solution into said first well and to automatically deposit a reagent solution into said second well. --

PENDING CLAIMS

1. A microplate, comprising:

a frame including a plurality of wells formed therein, each well including:

a first well having a relatively small concaved reservoir; and

a second well having a relatively large reservoir positioned near the relatively small concaved reservoir of said first well.

2. The microplate of Claim 1, wherein said first well and said second well overlap one another.

3. The microplate of Claim 1, wherein said first well and said second well are adjacent to one another.

4. The microplate of Claim 1, wherein said first well and said second well are connected to one another by a channel.

5. The microplate of Claim 1, wherein said frame has a footprint capable of being handled by a robotic handling system.

6. The microplate of Claim 1, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit a sample solution into said first well and to automatically deposit a reagent solution into said second well.

7. The microplate of Claim 1, further comprising a seal that is positioned over said plurality of wells.

8. The microplate of Claim 1, wherein said microplate is manufactured from cyclo-olefin.

9. The microplate of Claim 1, wherein said frame and said plurality of wells form a multi well high-throughput protein crystallography plate.

10. A protein crystallography plate, comprising:

a frame including a plurality of wells formed therein, each well including:

a first well including a relatively small reservoir having a substantially concaved form capable of receiving a protein solution and a reagent solution; and

a second well including a relatively large reservoir capable of receiving a reagent solution that has a higher concentration than the reagent solution within said first well, wherein the protein solution and the reagent solution within said first well interact with the reagent solution within said second well via a vapor diffusion process which enables the formation of protein crystals within said first well.

11. The protein crystallography plate of Claim 10, wherein said first well and said second well overlap one another.

12. The protein crystallography plate of Claim 10, wherein said first well and said second well are adjacent to one another.

13. The protein crystallography plate of Claim 10, wherein said first well and said second well are connected to one another by a channel.

14. The protein crystallography plate of Claim 10, wherein said frame has a footprint capable of being handled by a robotic handling system.

15. The protein crystallography plate of Claim 14, wherein said robotic handling system is a Society of Biomolecular Screening compatible robotic handling system.

16. (Once Amended) The protein crystallography plate of Claim 10, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

17. The protein crystallography plate of Claim 16, wherein said liquid handling system is a Society of Biomolecular Screening compatible liquid handling system.

18. The protein crystallography plate of Claim 10, further comprising a seal that is positioned over said plurality of wells.

19. The protein crystallography plate of Claim 10, wherein said frame and said plurality of wells are manufactured from cyclo-olefin.

20. The protein crystallography plate of Claim 10, wherein said protein crystallography plate is a 96 well high-throughput protein crystallography plate.

21. A method for using a microplate to form protein crystals, said method comprising the steps of:

prepping the microplate which includes a frame having a plurality of wells formed therein where each well includes a first well having a relatively small concaved reservoir and a second well having a relatively large reservoir, said step of prepping further includes:

depositing into the first well a protein solution and a reagent solution; and

depositing into the second well a reagent solution that has a higher concentration than the reagent solution deposited into the first well; and

sealing an opening of each well to enable the protein solution and the reagent solution within the first well to interact with the reagent solution within the second well via a vapor diffusion process which leads to the formation of protein crystals within the first well.

22. The method of Claim 21, wherein said first well and said second well overlap one another.

23. The method of Claim 21, wherein said first well and said second well are adjacent to one another.

24. The method of Claim 21, wherein said first well and said second well are connected to one another by a channel.

25. The method of Claim 21, wherein said microplate has a footprint capable of being handled by a Society of Biomolecular Screening compatible robotic handling system.

26. (Once Amended) The method of Claim 21, wherein each well is positioned on said frame so as to enable a Society of Biomolecular Screening compatible liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

27. The method of Claim 21, wherein said microplate is manufactured from cylco-olefin.

28. The method of Claim 21, wherein said microplate is a multi-well high-throughput crystallography plate.

29. A method for making a microplate, said method comprising the steps of:

injecting a molten plastic material into a mold cavity that includes sections shaped to form said microplate, said microplate includes:

a frame having a plurality of wells formed therein, each well including:

a first well having a relatively small concaved reservoir; and

a second well having a relatively large reservoir positioned near the relatively small concaved reservoir of the first well; and

cooling the plastic material to create said microplate.

30. The method of Claim 29, wherein said first well and said second well overlap one another.

31. (Once Amended) The method of Claim 29, wherein said first well and said second well are adjacent to one another.

32. The method of Claim 29, wherein said first well and said second well are connected to one another by a channel.

33. The method of Claim 29, wherein said frame has a footprint capable of being handled by a robotic handling system.

34. The method of Claim 29, wherein each well is positioned on said frame so as to enable a Society of Biomolecular Screening compatible liquid handling system to automatically deposit a sample solution into said first well and to automatically deposit a reagent solution into said second well.

35. The method of Claim 29, wherein said plastic material is cylco-olefin.

36. The method of Claim 29, wherein said microplate is a multi-well high-throughput protein crystallography plate.

37. (Added) A protein crystallography plate, comprising:

a frame made from cyclo-olefin that includes a plurality of wells formed therein, each well is also made from cyclo-olefin and includes:

a first well including a relatively small reservoir capable of receiving a protein solution and a reagent solution; and

a second well including a relatively large reservoir capable of receiving a reagent solution that has a higher concentration than the reagent solution within said first well, wherein the protein solution and the reagent solution within said first well interact with the reagent solution within said second well via a vapor diffusion process which enables the formation of protein crystals within said first well.

38. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well overlap one another.

39. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well are adjacent to one another.

40. (Added) The protein crystallography plate of Claim 37, wherein said first well and said second well are connected to one another by a channel.

41. (Added) The protein crystallography plate of Claim 37, wherein said frame has a footprint capable of being handled by a robotic handling system.

42. (Added) The protein crystallography plate of Claim 37, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

43. (Added) A method for using a microplate to form protein crystals, said method comprising the steps of:

prepping the microplate which is made from cyclo-olefin and includes a frame having a plurality of wells formed therein where each well includes a first well having a relatively small reservoir and a second well having a relatively large reservoir, said step of prepping further includes:

depositing into the first well a protein solution and a reagent solution; and

depositing into the second well a reagent solution that has a higher concentration than the reagent solution deposited into the first well; and

sealing an opening of each well to enable the protein solution and the reagent solution within the first well to interact with the reagent solution within the second well via a vapor diffusion process which leads to the formation of protein crystals within the first well.

44. (Added) The method of Claim 43, wherein said first well and said second well overlap one another.

45. (Added) The method of Claim 43, wherein said first well and said second well are adjacent to one another.

46. (Added) The method of Claim 43, wherein said first well and said second well are connected to one another by a channel.

47. (Added) The method of Claim 43, wherein said microplate has a footprint capable of being handled by a robotic handling system.

48. (Added) The method of Claim 43, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit the protein solution and the reagent solution into said first well and to automatically deposit the reagent solution into said second well.

49. (Added) A method for making a microplate, said method comprising the steps of:

injecting molten cylco-olefin into a mold cavity that includes sections shaped to form said microplate, said microplate includes:

a frame having a plurality of wells formed therein, each well including:

a first well having a relatively small reservoir; and

a second well having a relatively large reservoir positioned near the relatively small reservoir of the first well; and

cooling the cylco-olefin to create said microplate.

50. (Added) The method of Claim 49, wherein said first well and said second well overlap one another.

51. (Added) The method of Claim 49, wherein said first well and said second well are adjacent to one another.

52. (Added) The method of Claim 49, wherein said first well and said second well are connected to one another by a channel.

53. (Added) The method of Claim 49, wherein said frame has a footprint capable of being handled by a robotic handling system.

54. (Added) The method of Claim 49, wherein each well is positioned on said frame so as to enable a liquid handling system to automatically deposit a sample solution into said first well and to automatically deposit a reagent solution into said second well.